



# CNG COMPRESSORS FOR MOBILITY APPLICATIONS

STANDARD HIGH-PRESSURE COMPRESSORS FOR NATURAL GAS VEHICLE FILLING STATIONS

### STANDARDISED SOLUTIONS

Compressed natural gas (CNG) is an alternative fuel for vehicles. CNG is filled into storage vessels or directly into the vehicle at natural gas vehicle (NGV) filling stations.

Burckhardt Compression offers a wide range of Standard High-Pressure Compressors to compress natural gas to 250 bar g from atmospheric to elevated gas grid pressure. Our bare shaft compressor are available with engineering support for packagers.

### **CUSTOMER BENEFITS**

- Gas-tight crankcase with mechanical seal for zero gas loss
- Proven compressors according to country-specific standards (i.e. CE / PED, KHK, DOSH)
- Suitable for gas engine or electric motor as drivers
- Air-cooled cylinders and gas coolers. No water cooling required
- Metallic rings carefully selected for compressing high pressure natural gas

## STANDARD HIGH-PRESSURE COMPRESSORS FOR CNG COMPRESSION

### **TECHNICAL DATA – ELEVATED SUCTION PRESSURE**

Туре	Compressor Speed	<b>Motor Rating</b> kW	Suction Pressure bar a	<b>Capacity</b> Nm3/hr	Shaft Power at 251 bar a Discharge Pressure kW
C3T210.3 GP	910	180	12	970	153
	810	160	12	870	132
		180	16	1170	157
	750	132	12	805	120
		160	16	1085	143
		110	12	660	94
	615	132	16	890	112
		160	19	1065	125
	1230	90	12	495	81
	1050	75	12	425	66
		90	17	610	81
	915	75	12	370	55
C3U207.2 GP		75	16	500	66
		90	19	600	72
	750	55	12	300	44
		75	16	410	52
		75	19	490	57
	615	45	12	245	35
		55	16	335	41
		55	19	400	46

Typical performance range (+/- 5 % tolerance) of a Standard High-Pressure Compressor package for CNG applications (natural gas MW 18.5), based on suction gas temperature from 0 °C to 35 °C. Certified calculation available on request.

Special solutions outside this range are also available.

<b>TECHNICAL DATA – LOW SUC</b>	TION PRESSURE
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Туре	Compressor Speed rpm	<b>Motor Rating</b> kW	Suction Pressure bar a	<b>Capacity</b> Nm3/hr	Shaft Power at 251 bar a Discharge Pressure <sup>kW</sup>
	1045	132	1.05	395	117
		180	1.5	565	150
		200	1.8	680	170
	910	110	1.05	345	98
C5T223.18 GP		160	1.5	495	125
		160	1.8	595	143
	810	110	1.05	305	85
		132	1.5	440	109
		132	1.8	530	124
	720	90	1.05	270	74
		110	1.5	390	95
		132	1.8	470	108
	615	75	1.05	230	62
		90	1.5	330	80
		110	1.8	400	91

Typical performance range (+/- 5 % tolerance) of a Standard High-Pressure Compressor package for CNG applications (natural gas MW 18.5), based on suction gas temperature from 0 °C to 35 °C. and ambient temperature from 0 °C to 35 °C. Certified calculation available on request.

Special solutions outside this range are also available.

Туре	Compressor Speed rpm	<b>Motor Rating</b> kW	Suction Pressure bar a	<b>Capacity</b> Nm3/hr	Shaft Power at 251 bar a Discharge Pressure kW
C5U217.1 GP	1230	75	1.05	220	67
		90	1.4	300	81
	1050	75	1.05	190	55
		75	1.4	255	67
	915	55	1.05	170	47
5U21		75	1.4	220	57
Ö	750	45	1.05	130	37
		55	1.4	175	45
	615	37	1.05	105	30
		45	1.4	140	36
	1365	45	1.05	110	36
		45	1.3	135	40
C5C116 GP	1215	37	1.05	95	31
		45	1.4	120	35
	1075	30	1.05	85	26
		37	1.4	115	32
	850	22	1.05	65	20
		30	1.4	90	24
	615	18.5	1.05	45	14
		22	1.4	65	17

Typical performance range (+/- 5 % tolerance) of a Standard High-Pressure Compressor package for CNG applications (natural gas MW 18.5), based on suction gas temperature from 0 °C to 35 °C. and ambient temperature from 0 °C to 35 °C. Certified calculation available on request.

Special solutions outside this range are also available.